# THE INFLUENCE OF PRICE-TO-EARNING RATIO (PER) AND PRICE-TO-BOOK VALUE (PBV) ON STOCKPRICES IN THE AGRICULTURAL SECTOR LISTED ON THE INDONESIAN STOCK EXCHANGE

Meutia Handayani<sup>1</sup>, Rismadi<sup>2</sup>, Rizki Ramadhan<sup>3</sup>, Mutia Arfiani<sup>4</sup>, Hilmi<sup>5</sup>, Hidayatur Rizki<sup>6</sup>

<sup>1,2,3,4,6</sup>Accounting, Politeknik Aceh, Banda Aceh, Indonesia <sup>5</sup>Accounting, Universitas Malikussaleh, Lhokseumawe, Indonesia Corresponding Author: <u>meutiahandayani@politeknikaceh.ac.id</u>

## ABSTRACT

This study aims to analyze the effect of price to earning ratio and price-to-book value on stock prices in the agricultural sector which are listed on the Indonesia Stock Exchange period 2016- 2022. The population of this study is a company with a PBV < 3 times. A purposive sample is the sample selection method in this study. Data that met the criteria was obtained from 70 data samples to be examined. Data analysis technique using multiple linear regression analysis. The results of testing the hypothesis in this study show that the price-to-earning ratio has no significant effect on stock prices, while the price-to-book value has a significant effect on stock prices in the agricultural sector which are listed on the Indonesia Stock Exchange.

Keywords: Price-to-earning ratio, price-to-book value, stock price

Doi:

## INTRODUCTION

The Indonesian Stock Exchange (BEI) is an institution that provides facilities and systems for trading securities or securities in Indonesia. BEI also plays a role in developing the Indonesian capital market, increasing liquidity, and providing access for companies to obtain funding through public offering of shares. The Indonesian capital market already has 7.5 million investors with growth reaching 92.99% from the previous 3.8 million investors as of December 2020, where this figure has increased quite significantly from previous years.(www.idx.co.id). This strong investor growth indicates increasing investor interest and confidence in the Indonesian economy

The agricultural sector is still the main support for the economy in many developed and developing countries, one of which is Indonesia. Indonesia's agricultural sector has a production forest area of 12.82 million hectares, 10.50 million hectares of food crops, 104 large livestock companies, 9.21 million hectares of plantations, 7.2 million tons of capture fisheries production(bps.go.id). The agricultural sector is an option for retail investors to invest their capital in the Indonesian capital market. The agricultural sector provides a market cap of 214.172 trillion for the Indonesian capital market(tradingeconomics.com). The agricultural sector is a sector that carries out production in theform of agriculture, fisheries, plantations, food crops and animal husbandry. This sector has become primary consumption goods for society.

Bheema Yudhistira, Director of the Center for Economic Law Research, said that the performance of agricultural issuers' shares has been positive during the COVID-19 pandemic over the

last two years. The share price rose 22.2% until November 2021, the highest among issuers in other sectors. Bhima said that this opportunity is expected to continue to increase as the performance of the agricultural and fishing industries improves. In fact, he estimates that this positive trend will continue until 2023, as market demand for food remains strong. "The combination of all agricultural shares on the Indonesian Stock Exchange (BEI) will produce an agricultural index."(www.marketeers.com)

One way an investor invests in a company is by buying shares in that company. Stocks are an example of financial performance. A decrease in the share price of a company means that the company's performance is decreasing. Investors will be less interested in investing in the company because they are worried that the company will not make a profit. Investors pay companies based on the company's value reflected in the share price. Several factors influence the share price of a company listed on the Indonesia Stock Exchange, namely price/book value and price/earnings ratio.

Companies with unstable performance will make the market tend to value their shares cheaply, likewise, companies with consistent growth will be appreciated by the market by valuing their shares expensively. The most effective way to determine company growth is to observe PER (price to earnings ratio) and PBV (price to book value). PER and PBV are reliable indicators for assessing the fairness of share prices. However, problems begin to arise when the market has too much confidence in a stock. Too much confidence in a stock causes the price to rise higher than it should. The increase in shares which reached 22.2% indicates that investors' confidence in shares in the agricultural sector is very strong. Therefore, we need to look again at the increase in share prices whether the increase in share prices is influenced by PER and PBV or influenced by the level of investor confidence in the agricultural sector which is also accompanied by very significant investor growth.

This research aims to determine the price-to-book value (PBV) and price-to-earnings ratio (PER) of share prices in the agricultural sector listed on the Indonesia Stock Exchange, either simultaneously or partially.

## LITERATURE REVIEW

## Price to Earning Ratio (PER)

According toTannadi (2020, p. 16) The price/earnings ratio is the comparison between the market price per share and the company's net profit per share in a period. The Bu ratio shows the time it takes for the company to return the capital we invest. If we do not invest in a company with a PER of 4x, our capital will be returned within 4 years. PER is a machine feature that evaluates capacity in the company.

According to Parahita (2017, p. 165) The price-to-earnings ratio is a ratio used to see whether beer stock is selling too cheaply or too expensively. PER is easily obtained by dividing the share price by earnings per share. A stock with a PER of 30x indicates that if we buy the stock, it will take 30 years for our purchase capital to reach break-even. Of course it is stated that this will not usually result in increased profits. By comparing the PER of stocks in the beer industry, you quickly see whether beer stocks are selling high or low. PER provides an indication to investors or investors that share prices are weakening in a positive direction.

Using the PER method when assessing the fairness of stock prices often forgets that uncertain future projections must be taken into account (Handini & Astawinetu, 2020, p. 65). The factors that influence PER are as follows.

- 1. A business cycle that experiences growth will encourage companies to tend to have higher profits. If the business cycle experiences a decline, company profits will tend to decrease.
- 2. The level of profit required by investors.
- 3. Interest rates can also affect PER, where when interest rates are low, investment in the stock market tends to be more attractive.

According to Kurniawan & Liyanto (2021, p. 57), The P/E ratio is used by investors to see how much profit per share a company generates. Before calculating PER, we need to know how to calculate EPS. Earnings per share (EPS) is a company's net profit per share. The company's profits and losses are reflected directly in this EPS. A positive EPS value means the company is making a profit, while a negative EPS value means the company is experiencing a loss.

Earnings per share (EPS) is a ratio that shows a company's share of net income per share during a certain period. The increase or decrease in EPS from year to year is an important metric to understand whether a company's operations are running well. High EPS indicates that the company has succeeded in increasing the level of profits for shareholders, while low EPS indicates that the company has generated a low level of profits for shareholders (Mutiarani & Dewi, 2019).

The formula for finding earnings per share is as follows:

Earning Per Share =  $\frac{\text{Laba Bersih}}{\text{Saham Beredar}}$ 

The formula for finding the price-to-earnings ratio is as follows Price To Earning Ratio= Earning Per Share

Price to Book Value (PBV)

Price to book value is a ratio that shows the results of a comparison between the market price per share and the book value per share. This ratio is used by investors to see whether share prices in the market are considered too high or too low. PBV can be calculated by dividing the share price by BVPS. The way to get BVPS is to divide total equity by the number of outstanding shares. According to Tannadi (2020, p. 18) Price/book value is a comparison between the market price per share and the company's book value. The PBV ratio shows how cheap or high the share price is relative to the company's net capital. This ratio is used by investors to see how much it costs to own a company from the company's book value

A high company value indicates a high share price for the company (M.Hidayat, 2020). The following are several factors that influence price to book value:

- 1. Dividend payout ratio high can result in a lower PBV. The dividend payout ratio is a ratio that measures the amount of net profit the company provides to shareholders.
- 2. Current ratio Higher levels can cause an increase in PBV. The current ratio is a financial ratio that measures a company's ability to meet its short-term obligations using its short-term assets.
- 3. Debt to equity ratio high can result in lower PBV. Debt to equity ratio is a financial ratio that measures the proportion of a company's financing that comes from debt relative to the amount that comes from shareholder equity.

To find the book value per share, equity needs to be divided by the number of shares outstanding (Budiman, 2017, p. 184). According to Kurniawan & Liyanto (2021, p. 36) Price to book value (PBV) is used by investors to see the company's book value. Before calculating PBV, we need to calculate book value per share (BVPS). BVPS is the equity value per share of the company. A positive BVPS value means the company's capital is also positive, in general the BVPS value is positive. Anegative BVPS value means the company is under capitalized.

The formula for calculating book value per share is as follows:

Book Value per Share  $=\frac{\text{Total Ekuitas}}{\text{Saham Beredar}}$ 

The formula for calculating price to book value is as follows

Harga Saham

Price To BOOK Value  $= \frac{1}{\text{Book Value Per Share}}$ 

### Stock Price

According toParahita, (2017, p. 48), the share price is the price that occurs due to the large number of potential buyers and sellers of the shares. Each market player's perception of the price of a share is different. The share price is the price formed on a share which is influenced by the movements of investors in the market and depends on the supply and demand for the share. This share price can be expressed in terms of price per share and lot price per share. This share price is very important for investors because it can provide information about company value, company performance and company expectations.(Erawati et al., 2022). The share price formed from trading results is the main indicator that investors look at. The resulting share price cannot be separated directly from the rules set by the Indonesian stock market.(Anwar, 2021).

In choosing a company to buy, share price is one of the considerations investors take when researching the company. The share prices formed on this exchange are the result of market demand and supply by traders and investors. Share prices can be seen by market players through platforms such as RTI Business provided by the exchange, exchange web pages, as well as other platforms for use in trading transactions.

Stock prices are important for investors because they have economic consequences. When stock price fluctuations change market value, future opportunities for investors also change. Share prices reflect all information that occurs in the Indonesian capital market. because this step reflects the current economic situation(Azis et al., 2015, p. 146).

The share price consists of an agreement between the seller and buyer of shares based on their respective expectations of the profits that will be received or obtained from the company. Therefore, shareholders of a company need information regarding the formation of share prices. The formation of share prices is also regulated by the Indonesian stock exchange so that changes are more stable(Rohim et al., 2021).

The formation of share prices occurs depending on the supply and demand for shares. This supply and demand is driven by stock-specific factors (company performance and the industry in which the company operates) and non-economic factors such as interest rates, inflation, exchange rates, social conditions and policies and other factors.

According toBudiman (2017, p. 178) It is normal for share prices to rise and fall. However, this does not mean that the shares whose prices increase are shares of companies that are performing well. It could be that the increase in share prices was influenced by incorrect information. Likewise, a falling share price does not mean you bought the wrong company. The decline in share prices could also be influenced by incorrect information. The important thing in choosing shares is how we deal with these fluctuating share prices. The following are several factors that influence share prices:

- Political and regulatory conditions will influence changes in share prices. Political instability, changes in government policy, or regulatory changes can negatively affect stock prices. Political uncertainty can give rise to economic uncertainty that disturbs investors and reduces their confidence in the stock market.
- 2. Invalid information greatly affects stock market conditions. Where the media becomes an icon that greatly influences the mentality of market players.

### **RESEARCH METHODS**

The companies used as respondents in this research are agricultural sector companies listed on the Indonesia Stock Exchange for the period up to 2022. The agricultural sector is one of the economic sectors related to the production, processing and distribution of agricultural products. According toJuliandi (2014, p. 172) Secondary data is data that is already available that researchers quote for research purposes. The data taken is data collected by other parties. The population that will be used in this research is the agricultural sector listed on the Indonesia Stock Exchange for the 2016-2022 period. The sample selection method used in this research was purposive sampling. This research uses multiple linear regression analysis and uses the classic assumption test. This analysis will use known independent variables to predict the value of the dependent variable(Sulaiman, 2014, p. 63). The multiple linear regression equation is:

### Y = a + b1X1 + b2X2 + e

The hypothesis test used in this research is the coefficient of determination which is a value that describes how much the change in the dependent variable can be explained by the change in the independent variable.(Santosu & Ashari, 2015, p. 78).

The T-test or partial test is used to see the significance of the individual independent influence on the dependent variable. This test is carried out by comparing the t-value with the t-statistic (Sulaiman, 2014, p. 78). The criteria for this test are as follows:

H0: if p-value> 0.05 then H0 is accepted and Ha is rejected (has no effect).

Ha: if the p-value <0.05 then H0 is rejected and Ha is accepted (influential

The F-test or simultaneous test is used to see the overall influence of the independent variable on the dependent variable. This test is carried out by comparing fcount with f table (Sulaiman, 2014, p. 75). The criteria for this test are as follows:

Ho: if p-value> 0.05 then Ho is accepted and Ha is rejected (no effect).

Ha: if the p-value <0.05 then Ho is accepted and Ha is rejected (influence).

## **RESULTS AND DISCUSSION**

Normality Test

The results of normality testing with the Kolmogorov-Smirnov (K-S) statistical test can be seen via Asymp. Sig. (2-tailed) of 0.200 which has a value greater than 0.05 (0.200 > 0.05). From this it can be concluded that the data in the regression model meets the normality assumption. Test results can be seen in the table below:

One-Sar	nple Kolmogorov-Sm	irnov Test
Unstandardized		
Residual		
Ν		70
Normal	Normal	.0000000
Parameters <sup>a,b</sup>	Parameters <sup>a,b</sup>	
		.62101258
Most Extreme	Most Extreme	.090
Differences	Differences	
		.090
		076
Test Statistic	Test Statistic	.090
Asymp. Sig. (2- tailed)	Asymp. Sig. (2- tailed)	.200 <sup>c,d</sup>

# Table 1

## Multicollinearity Test

Based on the results of data processing carried out using SPSS, it can be seen that the variables have a Tolerance value > 0.1 and a VIF value < 10. It can be seen in table 2 that the

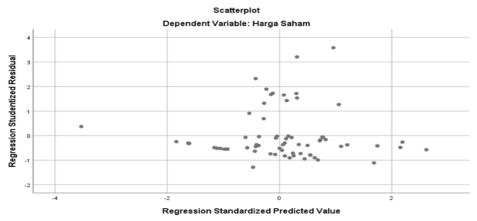
tolerance value for the two variables PER and PBV is 1.026 which is at the limit of greater than 0.1 and smaller than 10, so it can be concluded that there is no multicollinearity between the independent variables and the regression model meets the multicollinearity assumption test.

	Table 2							
Multicollinearity Test   Unstandardized Standardized Collinearity   Model Coefficients t Sig. Statistics								
	В	Std. Error	Beta	0		Tolerance	VIF	
1	(Constant)	642.050	362.528	1	.771	.081		
	PER	-1.416	8.790	019	161	.873	.974	1.026
	PBV	782.308	299.532	.308	2.612	.011	.974	1.026

Test results can be seen in the table below:

# Heteroscedasticity Test

Based on the results of data processing carried out using SPSS, it can be seen that Stock price, PBH, and PER have no clear pattern in the Scatter Plot test results, and the points spread above and below the number 0 on the Y-axis, so it can be concluded that this does not happen. heteroscedasticity. Test results can be seen in the image below:



### Picture 1

Based on the results of testing the coefficient of determination, it can be seen that the R Square value is 0.093, which means that 9.3% of the share price variable can be explained by PER and PBV while the remaining 90.7% is explained by other variables not examined in this research. Test results can be seen in the table 3 below:

		Tabl	e 3	
		Heterosceda	sticity Test	
			Adiustad	Std. Error of the
			Adjusted	of the
odel	R	R Square	R Square	Estimate
1	.305ª	.093	.066	1621.893

Decision-making is done by looking at the value in the Sig column. namely for X1 PER of 0.873, In this research, the significance level used is 5% so that based on the table above, a decision can be made that X1 PER does not have a partially significant effect on share prices. Meanwhile, X2 PBV has a partially significant effect on share prices. Test results can be seen in the table below:

Table 4							
T-Test							
Model		Unstandardiz	ed Coefficients	Standardized Coefficients			
		В	Std. Error	Beta	t	Sig.	
1	(Constant)	642.050	362.528		1.771	.081	
	PER	-1.416	8.790	019	161	.873	
	PBV	782.308	299.532	.308	2.612	.011	

Table 1

Source: Data processed (2023)

Based on the simultaneous significance test, it is known that the significance level (0.038)0.05. This means that the independent variable simultaneously influences the dependent variable.

			100				
F-Test							
Model		Sum Squares	df	Mea Square	F	Sig	
1	Regression	18122670.943	2	9061335.471	3.445	.038 <sup>b</sup>	
	Residual	176246010.543	67	2630537.471			
	Total	194368681.486	69				

Table 5

Source: Data processed (2023)

### The effect of price to earnings ratio on stock prices

Based on the SPSS test results in table 1, the significance value of the price to earnings ratio variable on stock prices is 0.873 > 0.05, it can be concluded that the price to earnings ratio variable has no effect on stock prices. So the hypothesis is rejected. The results of this study are in line with research(Mutiarani & Dewi, 2019)but it is not in line with the research results(Rahmadewi & Abundanti, 2018) which states that PER has a significant effect on share prices.

The results of this research show that the price to earnings ratio has no effect on stock prices, meaning that in the agricultural sector, increases and decreases in stock prices are not influenced by PER. This means that the increase in price to earnings ratio is not accompanied by an increase in share prices. PER can provide an idea of how investors assess the value of a company and how its share price is positioned in the market.

### The Influence of Price to Book Value on Stock Prices

Based on the results of the SPSS test, the significance value of the price-to-book value variable on share prices is 0.011 < 0.05 with a value, it can be concluded that the price to book value variable affects share prices. So the hypothesis is accepted. The results of this study are in line with research (Mutiarani & Dewi, 2019) but it is not in line with research(Jumhana, 2019)which states that PBV does not have a significant effect on share prices.

The results of this research show that the increase and decrease in share prices in the agricultural sector listed on the Indonesia Stock Exchange are influenced by price to book value. This means that the increase in price to book value is followed by an increase in share prices. PBV can provide an idea of how investors assess the value of a company and how its share price is positioned in the market. Although it should not be the only factor to consider, PBV remains an important analytical tool in helping to identify potential stock value

It can be seen from the test results above that PER and PBV are related to stock prices in the agricultural sector listed on the Indonesian Stock Exchange. This means that the variables in this research influence stock prices. Based on testing the coefficient of determination, it can be seen that the R Square value is 0.93, which means that 93% of the variables that influence stock prices can be explained by PER and PBV, while the remaining 7% is explained by other variables. not examined in this research as an influence on stock prices in this sector. agriculture listed on the Indonesian Stock Exchange.

### CONCLUSION

Price to earnings ratio does not have a significant effect on share prices in the agricultural sector listed on the Indonesian Stock Exchange. For Price to book value has a significant effect on share prices in the agricultural sector listed on the Indonesia Stock Exchange.

# REFERENCES

- Anwar, adi misykatul. (2021). Pengaruh Current Ratio(Cr), Debt To Equity Ratio(Der), Return On Asset(Roa) Terhadap Harga Saham (Studi Kasus Pada Perusahaansektor Makanan Dan Minuman Yang Terdaftar Di Bei Tahun 2017-2019.
- Azis, M., Mintarti, S., & Nadir, M. (2015). *Manajemen Investasi Fundamental, Tehnikal, Perilaku Investro Dan Return Saham*. Grup Penerbitan CV BUDI UTAMA.
- bps.go.id. (2023). https://<u>www.bps.go.id/subject/53/tanaman-pangan.html#subjekViewTab3.</u> Budiman, R. (2017). Investing Is Easy Teknik Analisa Dan Strategi Investasi Saham Untuk Pemula. PT Gramedia.
- Budiman, R. (2020). Jurus-jurus valuasi saham. PT Elex Media Komputindo.
- Erawati, F. N., Angarani, D., & Hasan, K. (2022). Analisis harga saham, return saham dan likuiditas saham sebelum dan sesudah akuisisi pada PT. Semen Indonesia. 4, 356–361. https://doi.org/10.20885/ncaf.vol4.art44
- Handani, S., & Astawinetu, erwin dyah. (2020). *Teori Portofolio Dan Pasar Modal Indonesia*. Scopindo Media Pustaka.
- Herlianto, D. (2013). Manajemen Investasi Plus Jurus Mendeteksi Investasi Bodong.
- Hidayat, M. (2020). *Faktor Yang Mempengaruhi Price To Book Value* (Vol. 20, Issue 2). <u>http://jurnaltsm.id/index.php/JBA</u>
- Iraw, P. (2014). The Fundamental Puzzle. Garuda Mas Sejahtera.
- Juliandi, A., Irfan, & Manurung, S. (2014). Metode Penilitian Bisnis konsep & aplikasi.
- Jumhana, r. chepi safei. (2019). Pengaruh Per Dan Pbvterhadap Harga Saham Perusahaanpt Lippo Karawaci Tbk.
- Kurniawan, R., & Sudarso, L. (2021). Fundamental VS Tehcnikal which side are you in? PT Gramedia. Nony Mutiarani, N., & Dewi, R. R. (2019). Pengaruh Price Earning Ratio, Price To Book Value, Dan Inflasi Terhadap Harga Saham Yang Terindeks Idx 30 (Vol. 03, Issue 02). http://yuknabungsaham.idx.co.id

- Parahita. (2017). *Investing Ideas Kumpulan Ide Sederhana Tentang Analisis Fundamental Saham*. Cvgaruda mas sejahtera.
- Rahmadewi, P. W., & Abundanti, N. (2018). *Pengaruh Eps, Per, Cr, Dan Roe Terhadap Harga Saham Di Bursa Efek Indonesia*. 7(4), 2106–2133. https://doi.org/10.24843/EJMUNUD.2018.v7.i04.p14
- Rohim, A., Pgri, S., & Jombang, D. (2021). Analisis Perbedaan Nilai Harga Saham Sebelum DanSetelahStockSplit(Vol.4).https://ejournal.stiedewantara.ac.id/index.php/JMD/issue/view/771

Santosu, purbayu budi. (2015). Analisis statistik dengan excel & SPSS. Andi.

Sulaiman, W. (2014). Analisis regresi menggunakan SPSS contoh kasus & pemecahannya. andi.

Tannadi, B. (2020). Analisis Fundamental. PT Elex Media Komputindo.

tradingeconomics.com. (2023). https://tradingeconomics.com/indonesia/indicators.

www.idx.co.id. (2023). https://idx.co.id/id/berita/berita/.